

## **ABSTRACT**

The present invention relates to peptides of one or more portions of the human chorionic gonadotropin β-chain as well as methods for treatment and prevention of diseases, including HIV infection, cancer and wasting syndrome, and methods of promoting hematopoiesis using human chorionic gonadotropin, employing the β-chain of human chorionic gonadotropin, peptides containing a sequence of one or more portions of the β-chain of human chorionic gonadotropin and derivatives and analogues thereof. The invention further relates to fractions of sources and or preparations of human chorionic gonadotropin, such as fractions of human early pregnancy urine, which fractions have anti-HIV activity, anti-cancer activity, anti-wasting activity, and/or pro-hematopoietic activity. The present invention further relates to pharmaceutical compositions for treating and/or preventing HIV infection, cancer, and/or wasting, and/or for promoting hematopoiesis.